

bias existed in decision making and treatment of patients by the ambulance personnel. Finally, not all arrests that occurred during the study period could be included in this study.

Conclusion

Use of AEDs by first responders did not significantly increase survival to hospital discharge but did significantly improve return to spontaneous circulation and admission to hospital. Much of the potential benefit of dispatched first responders using AEDs was limited by time lost in decision making, incorrect decisions in the emergency medical dispatch centre, and delays in communication between dispatch centres.

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What is already known on this topic

Reducing time to defibrillation improves survival after out of hospital cardiac arrest

Police officers and fire fighters can safely use an automated external defibrillator

What this study adds

This randomised trial could show only modest benefit of defibrillation by first responders

Delay in time to call, duration of call handling, and delay in dispatching severely reduce the potential benefit of dispatched first responders

An automated external defibrillator programme must focus on optimising the civic response and the dispatch process

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All that glisters is not gold

The "gold standard" is a pervasive metaphor in health research. Whether it is an argument about establishing a standard for quality of care or a debate about the relative merits of diagnostic investigations, the term is universally used to describe the best care, the best test, or the most certain medical knowledge. A Medline search on the phrase produces 7891 results.

But is it a good metaphor? The gold standard refers to currencies that are tied to the value of gold, as was the case in developed countries in the 19th century. This is in contrast to fiat currency, the modern form of money, which is not linked to the value of any commodity. Over history the value of money has been linked to gold, to silver (the origin of the pound sterling), or to any other commodity that governments chose. Gold is a convenient, but arbitrary, substance with which to define currency, but governments have from time to time debated and used alternatives.

Throughout history countries have adhered to the gold standard as and when it suited them: Britain suspended gold convertibility in the wars with America and France in the early 19th century, but restored it afterwards, when capital flows were

more favourable. Similarly, the combatant countries of the first world war suspended the gold standard in 1914, unable to manage the economic conditions imposed by such an arbitrary definition of value. It was briefly restored during 1928-31, but economic historians widely consider that this contributed to the severity of the great depression in the 1930s. From 1946, the Bretton Woods postwar economic agreement tied the US dollar to gold, and other currencies to the dollar, but President Nixon was forced to suspend convertibility into gold in 1971 as a worsening balance of payments depleted US gold reserves. Since then most countries have floated their currencies, which have no intrinsic commodity value.

So the gold standard is an outdated, arbitrary form of defining value that seems to contribute to instability and which has been used only when it suited the country concerned. Is this a good metaphor for the best care, or the most certain medical knowledge?

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